

## F.32. EFFECT OF ROSE HIP ON GINGERBREAD QUALITY AND STABILITY

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**Abstract.** The development of new generation foods to provide consumers with dietary fiber, antioxidants, vitamins is particular interest. The aim of the scientific research was to develop the manufacturing technology of glazed sweet gingerbreads with the use of rosehip fruit (*Rosa canina L.*) powder additions to diversify the range of functional products. The addition of vegetable powder was used in concentrations of 2 and 4% compared to the mass of the flour, and for glazing, the syrup fortified with rosehip extract was used in an amount of 2% compared to the mass of the syrup. The total content of polyphenols, flavonoids, cinnamic acids, flavonols, carotenoids and antioxidant activity were analyzed in the rose hip extract. The content of individual polyphenols and carotenoids was identified. The results demonstrated a high content of polyphenols, carotenoids and antioxidant activity. The main phenolic components are procyanidin B1, chlorogenic acid, epicatechin, procyanidin B2, gallic acid, salicylic acid and catechin. The carotenoid complex includes all-trans-carotene, all-trans-lycopene, zeaxanthin,  $\alpha$ -cryptoxanthin,  $\beta$ -cryptoxanthin, rubixanthin, cis- $\beta$ -carotene, cis- $\gamma$ -carotene and cis-lycopene. The addition of rosehip powder to gingerbread has improved the overall characteristics, increased its antioxidant activity and microbiological stability.

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